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	OATH 312 SPEC	<u>10-16-01</u>						
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[XRUSH] RESPONSE: See attached. Inventors' names: RICHARD GERARDUS FRANCISCUS VISSER CHRISTAAN JOSEF JOHANNES RAEMAKERS EVERT JACOBSON JOHANNA ELISABETH MARIA BERGERVOET VAN DEELAN								
				INIT	IALS: KAT			

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(12) United States Patent

Visser et al.

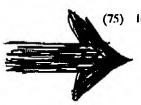
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METHODS FOR PRODUCING AND TRANSFORMING CASSAVE PROTOPLASTS



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(52)	U.S. CI.	/ / / / / / / / / / / / / / / / / /	435/421; 435/430; 435/430-1;
()			435/420; 435/410
(58)	Field of	Search	800/284, 435/421,
(0.7)	• , , ,		435/430.1, 430, 420, 410

References Cited (56)

U.S. PATENT DOCUMENTS

4,634,674 A * 1/1987 Shahin

435/240

FOREIGN PATENT DOCUMENTS

7/1992 WO WO 92 11382 A 5/1994 WO WO 94 11520 A

OTHER PUBLICATIONS

Shahin et al. "Cassava Mesophyll Protoplasis: Isolation, proliferation, and shoot formation" Plant Science Letters, 17(1980) 459-465.*

Cazaux, E. et al. Microcallus formation from Hevea brasiliensis protoplasts isolated from embryogenic callus Plant Cell Reports 13 (5): p272-276, 1994.

Taylor et al. Production of Friable Embryogenic Calli and Suspension Culture Systems in Two Genotypes of Cassava In Second International Scientific Meeting of Cassava Biotechnology Network Bogor Indonesia p 229-240, Aug. 1994.*

Szabados L, et al. Invitro Somatic Embryogenesis and Plant Regeneration of Cassava Plant Cell Reports V6 N3 p. 248-251, 1987.*

Sudarmonowati, E. Somatic embryogenesis and plant regeneration in cassava (Manihot esculenta Crantz) Dissertation Abstracts International, vol. 52, No. 7 p. 3378-B, Jan. 1992.*

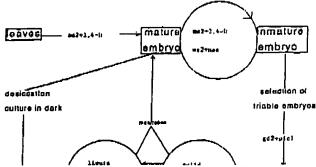
(List continued on next page.)

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ABSTRACT

The invention relates to a method for producing protoplasts of cassava or closely related species, which protoplasts are capable of regeneration into plants. The method comprises producing friable embryogenic callus from explants of cassava or closely related species and isolating protoplasts from suid friable embryogenic callus. The invention also concerns protoplasts obtainable by said method. The invention further relates to a method for transforming such a protoplast of cassava or closely related species, and transformed protoplasts obtainable thereby. In addition, the invention concerns a method for regenerating plants from these protoplasts and a cassava plant or closely related species obtainable thereby.

9 Claims, 1 Drawing Sheet-



PAGE 2/2 * RCVD AT 8/17/2005 11:56:01 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/25 * DNIS:7464658 * CSID:5168223582 * DURATION (mm-ss):01-12



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SERIAL NUMBER 09/832,626 04/11/2001 RULE 536 1623 NO. 294-52 CIP APPLICANTS Richard G.F. Visser, Et Bennekom, NETHERLANDS; Christlann J.J. Raemakers, CN Arnhem, NETHERLANDS; Evert Jacobson, BD Wageningen, NETHERLANDS; Johanna E.M. Bergervoet van Deelen, JM Renkum, NETHERLANDS; This application is a CIP of 09/180,481 02/01/1999 PAT 6,551,827 *** FOREIGN APPLICATIONS ************************************										
Richard G.F. Visser, Et Bennekom, NETHERLANDS; Christiann J.J. Raemakers, CN Arnhem, NETHERLANDS; Evert Jacobson, BD Wageningen, NETHERLANDS; Johanna E.M. Bergervoet van Deelen, JM Renkum, NETHERLANDS; ****CONTINUING DATA **********************************	I)	ER	DATE 04/11/2001							
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